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(54) **DEVICE FOR A DRIVETRAIN OF A HYBRID VEHICLE, DRIVETRAIN AND METHOD FOR OPERATING THE SAME**

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See application file for complete search history.

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(57) **ABSTRACT**

A device for a drive train of a hybrid vehicle having a planetary gear set which comprises a carrier element, a sun gear element, and a ring gear element. A first element connects to a first input shaft of a first subtransmission of a transmission, and a second element connects to an electric machine of a hybrid drive. A first shift element which couples, in a first shift position, a third of the elements to a second input shaft of a second subtransmission of the transmission, to which an internal combustion engine can be coupled, and, in a second shift position, can be coupled to another element of the planetary gear set, and having a second shift element which couples the input shafts of both subtransmissions when engaged and separates the input shafts of both subtransmissions when disengaged.

17 Claims, 8 Drawing Sheets